



# business on demand

Accessing Secure eBusiness Systems from NMCI

Remember the law  
of supply and demand?

Well, demand won.

# @business on demand™

An enterprise whose business processes – integrated end-to-end across the company and with key partners, suppliers and customers – can respond with flexibility and speed to any customer demand, market opportunity or threat



# Constantly Changing Environment

Requires constant improvement in business design and business process

Productivity

Governance

Economy

Capital and Asset Utilization

Security  
Threats

Pricing  
Pressures

Customer  
Preferences

**business**

**on demand business**

**technology**

Open Movement

Commoditization

Autonomic Computing

Grids

Web Services

Clusters

Blades

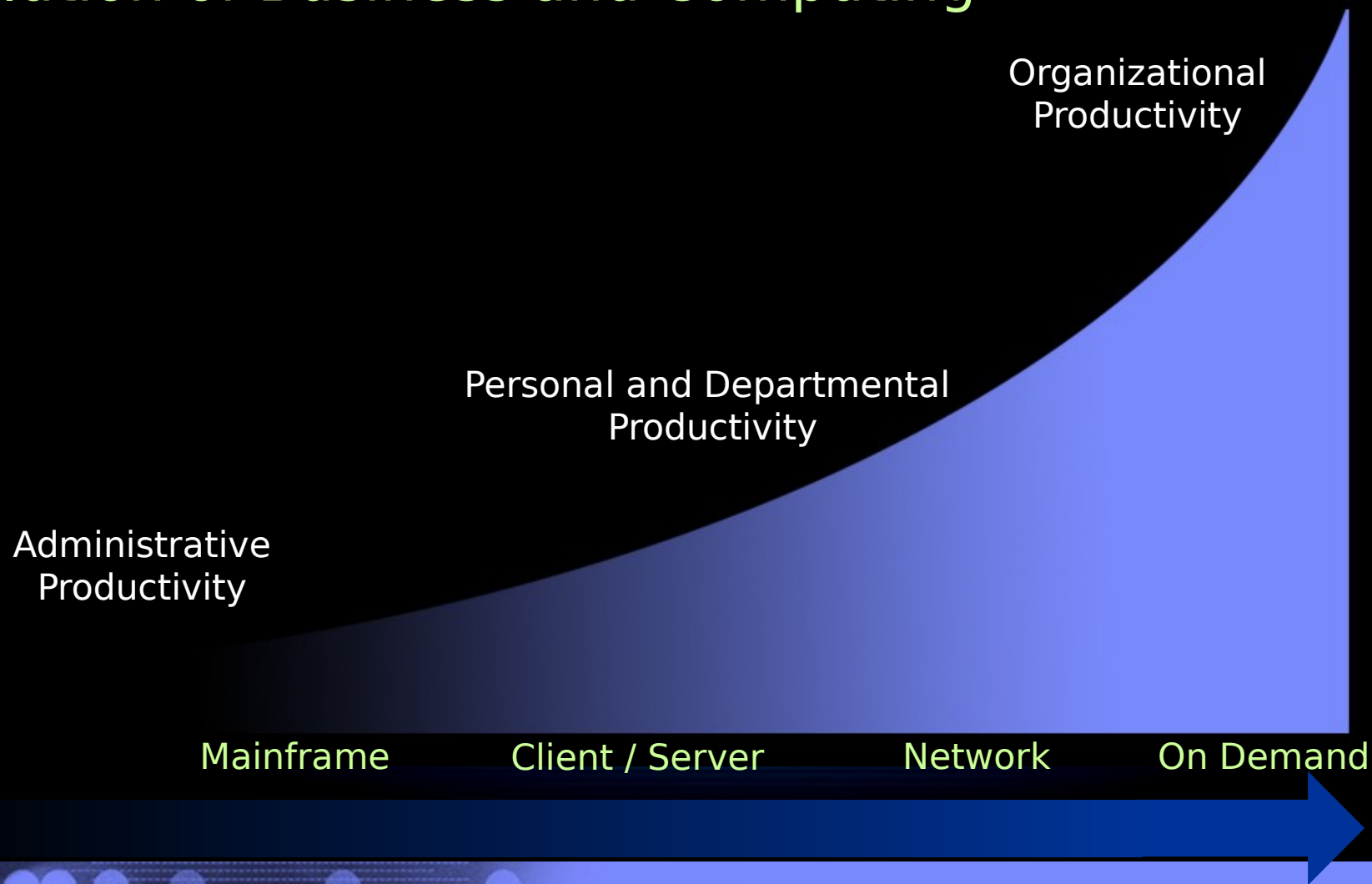
Virtualization

Standards

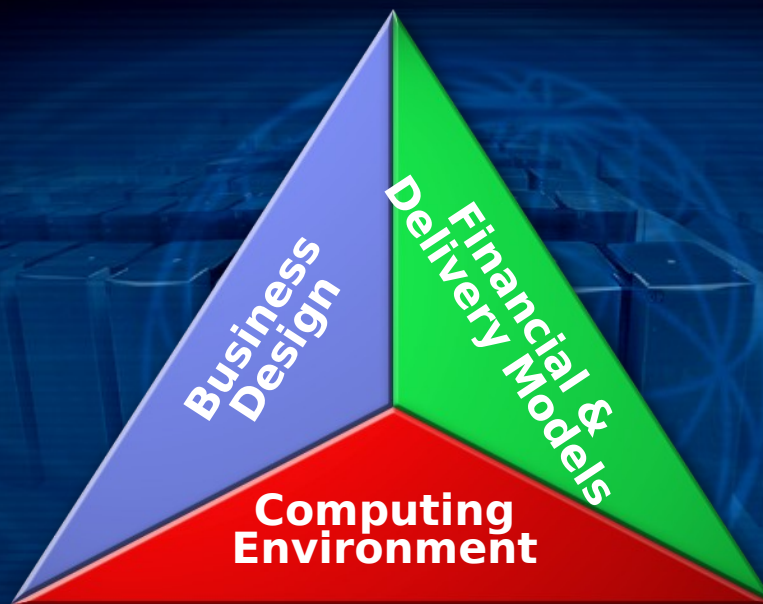
# The evolution of computing



# Evolution of Business and Computing



# On Demand Business





# On Demand Business

*On demand business*

*Responsive  
Variable  
Focused  
Resilient*

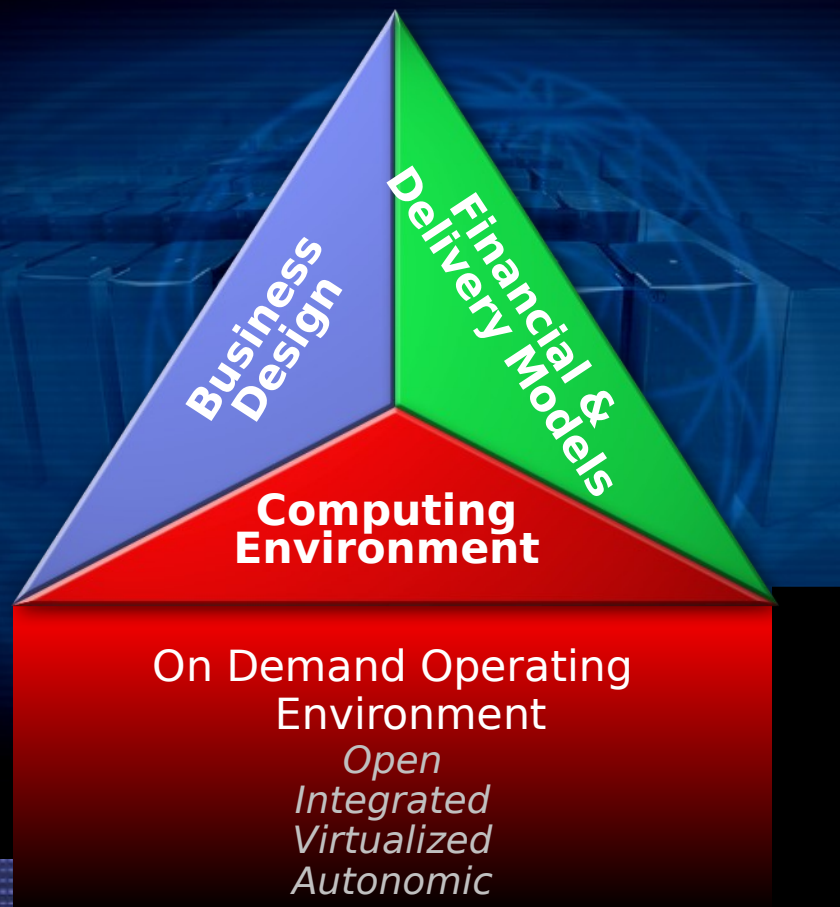
**Business  
Design**

**Financial &  
Delivery Models**

**Computing  
Environment**

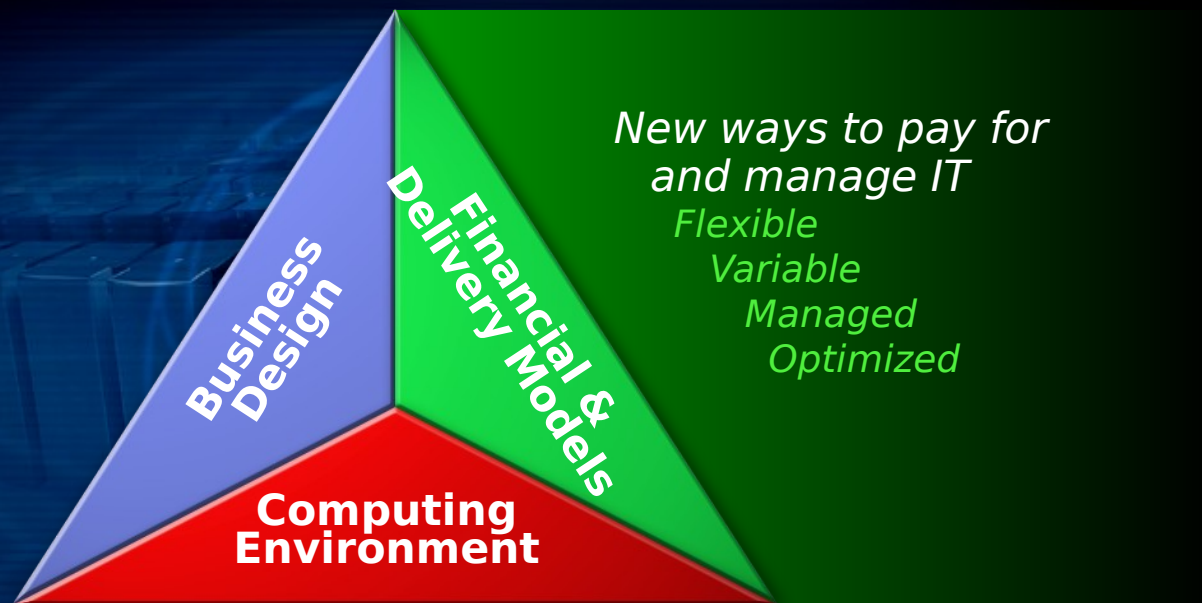


# On Demand Business Requires an On Demand Operating Environment

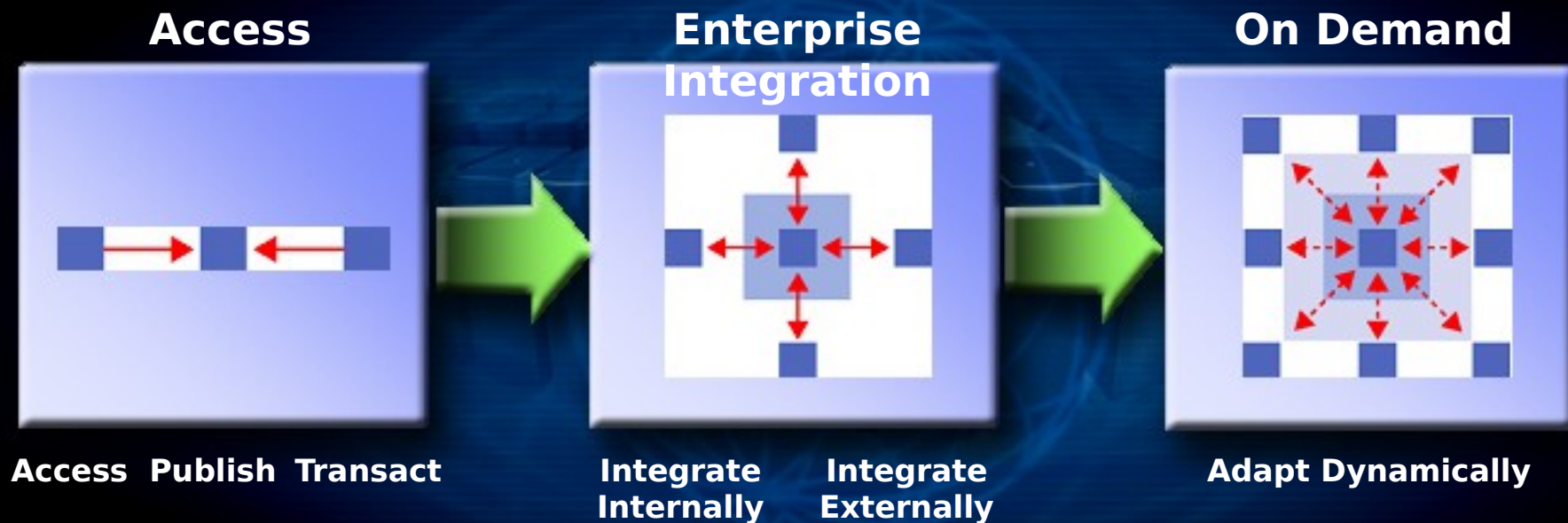


# On Demand Business

## Redefines Financial and Delivery Models



# Stages of e-business adoption



# Navy One Touch Support

## A secure ebusiness system

### Accessed from NMCI



# Single Destination for Logistics Rules and Tools

**One  
Touch  
Support  
V3.2**

One Internet Presence

One Data Retrieval

One View of Data

One User Registration Process

# Commercially Hosted - DITSCAP Certified

## [www.onetouch.navy.mil](http://www.onetouch.navy.mil)

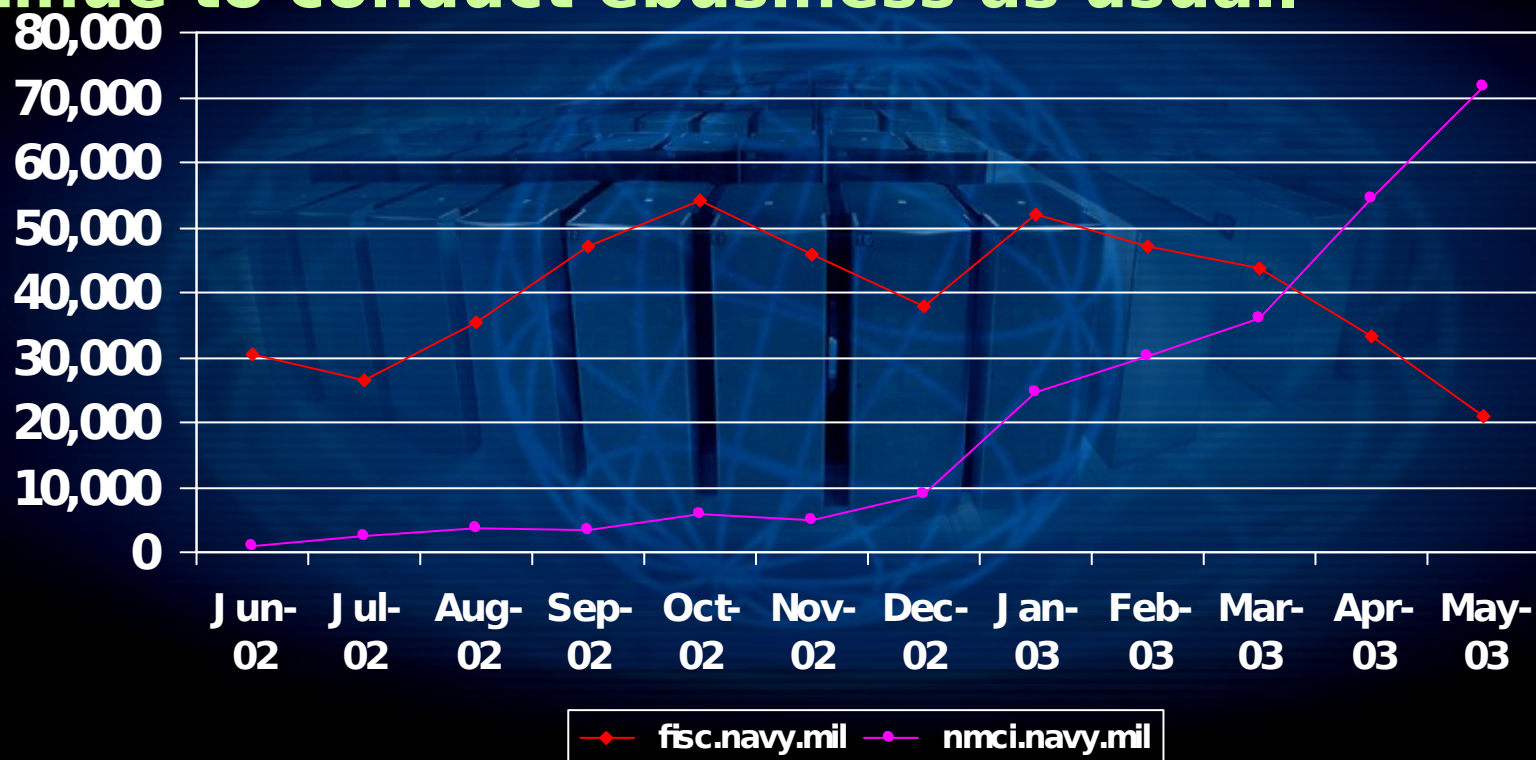
- A Technical Architecture that:
  - Is Scalable, Highly Reliable and Open
  - Is Flexible and Extensible to support integration and additional interfaces
  - Complies with Navy and DoD Security Requirements
  - Is a modular based architecture
    - incorporating relevant Task Force Web (TFW) web enabled Navy architecture guidance as appropriate
  - Complies with NMCI issued guidelines

# Navy One Touch Support

- A Web enabled eBusiness system
- Supply side applications and information
  - Supply chain information
  - Product availability
  - Buy products
  - Relevant logistics rules
  - Region specific support information
- Unifying registration of users of multiple legacy systems at a single point of entry



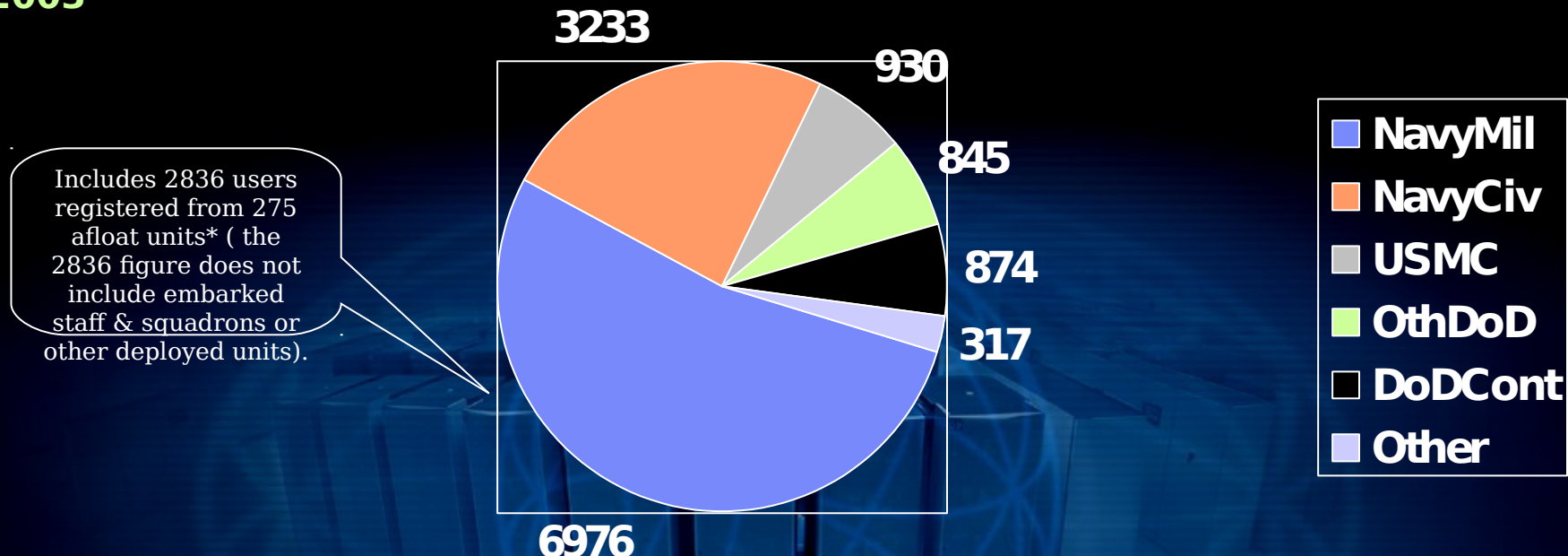
**Users transition to NMCI from legacy domains such as fisc.navy.mil. They just point their enterprise approved browser to onetouch.navy.mil, enter their user ID and password, and continue to conduct ebusiness as usual.**





# OTS User Population Profile

May, 2003



- The Other DoD category includes users that have selected the following categories:
  - Army: 22
  - Coast Guard: 74
  - DoD Civilian: 465
  - DoD Foreign National: 121
- Reservist: 79
  - Air Force: 85
- The users in the USMC Category are primarily military (844 of the 930 total)
- The Other count includes the 273 users that selected the Other category as well as 44 users that selected the OtherFedGovt category when they registered.
- **\* There are an additional 13 USNS Afloat units with 35 Navy Civilian users. Total Afloat units with OTS users is 288.**

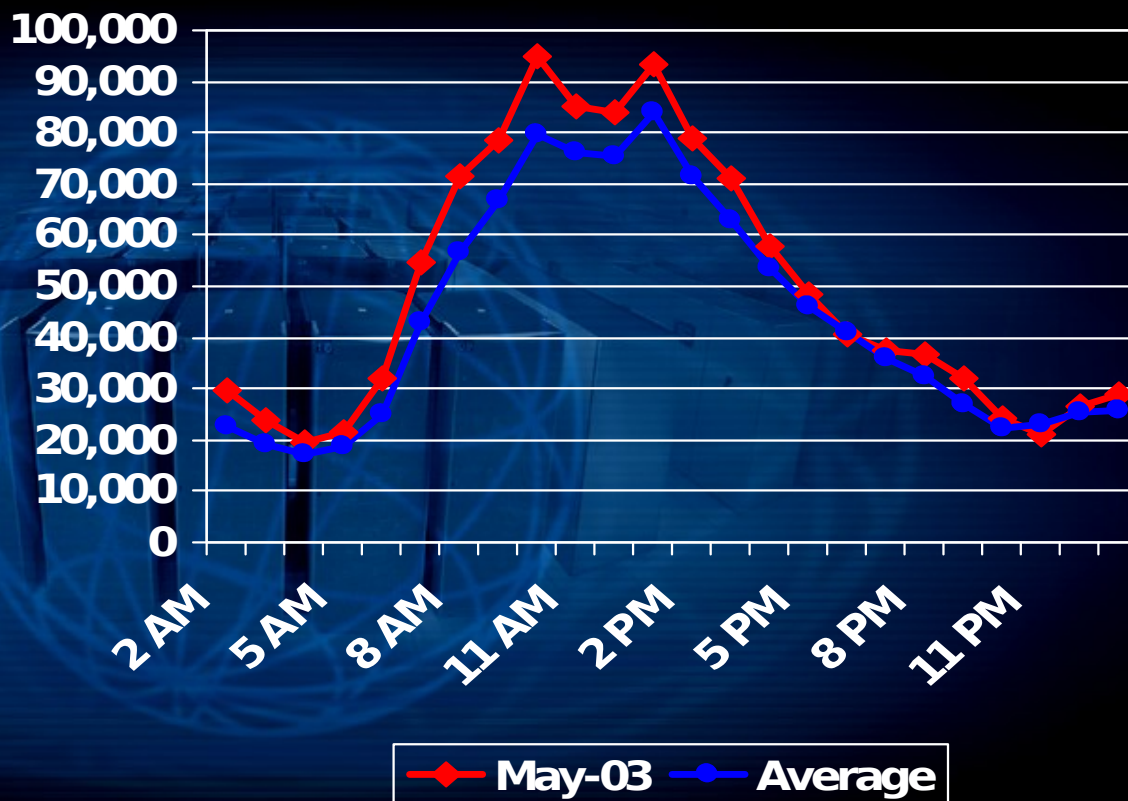
## Doing a little eBusiness

- First year of operations for OTS v3.2
  - 63 million hits
  - 108 billion bytes transferred
  - 920 thousand logins
  - 12 million page views
  - 2 million query transactions
  - 1 million MILSTRIP transactions
  - 13,000 registered users

# What they need, when they need it - On Demand - page views served up by hour

## ■ Availability (last 90 days)

- 99.97% Available as % of Scheduled Time
- 99.55% Total System Availability
- 0.42% Scheduled Maintenance
- 0.025 Unplanned Downtime (30 minutes)





# Demand for requisition status increased during Operation Iraqi Freedom

Page Views -Thousands





# Access Management

- User Registration
  - DoD Employee Status Verification
    - If not:
      - Approval Authority Contact Information Request
        - Business Functional Approval Work Flow
      - Sponsor Letter Requirements
- User and User Profile Management
  - Approving/Disapproving Requests
  - Request Additional Business Functions
  - Update Contact Information
  - Reset Password

# Core Supply Chain Functions

- Applications
  - Technical Screening, Stock Check, Requisition Input, Requisition Status, File Text Upload, Batch Query
- Integrated functions where possible
  - Example: From Req Status Return
    - Detail History
      - Ship Status Details
    - Follow-up, Modify, Cancel, or Order Again
    - Technical Screen Item
- Access over 30 data sources

# Integrated business functions... an illustration that starts with the basic requisition status results

STANDARD NON-STANDARD HELP

## Intermediate Selection - Standard Requisition Status

Results for Document # R205503090Y298

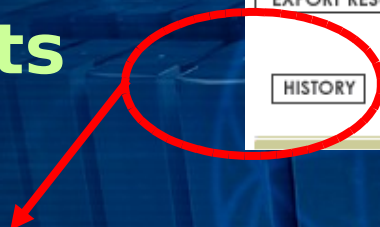
Requisition #	NSN	Status	Last Holder	Qty	Priority	Supply Action Date	Mode of Shipment	Document Id
⊙ R205503090Y298	<a href="#">5960000739277</a>			2	02	04/11/2003		DRA

Code Description (roll over code to view description)

Requisition #: R205503090Y298 - Requisition Document Number

EXPORT RESULTS

HISTORY TRANSLATE FOLLOW-UP MODIFY ORDER SHIP STATUS ORDER AGAIN CANCEL ORDER



HELP

## Requisition Status - History

History for Document # R205503090Y298

DocID	Suffix	RI (From)	NIIN	Qty	Status	RI (To)	LHA	Action Date	Ship Date	Mode
DRA			<a href="#">000739277</a>	2		S9E		04/11/2003		
AS1	NZZ		<a href="#">000739277</a>	2				04/02/2003	04/02/2003	J
AE8	SCF		<a href="#">000739277</a>	2	BA		SCF	04/01/2003	04/02/2003	
AE8	SCF		<a href="#">000739277</a>	2				04/01/2003		

# Drilling down into the supply chain

HISTORY TRANSLATE FOLLOW-UP MODIFY ORDER **SHIP STATUS** ORDER AGAIN CANCEL ORDER

## MILSTRIP Shipment Status

Requisition Document #: R205503090Y298

Requested Qty: 2

Shipped Qty: 2

Cancelled Qty:

Denied Qty: 0

Date Received: 04/01/2003

Date Shipped: 04/02/2003

Status: SHIPPED

Depot: DDYJ YOKOSUKA JAPANAP 96349-1500

Ship To: R20550

Mode of Shipment: SMALL PARCEL CARRIER

Carrier: DHL AIRWAYS

Tracking #: DHL 2345124644

TCN: R205503090Y298XXX

GBL:



# And a little deeper look - shipper scan activity

Date Received:	04/01/2003
Date Shipped:	04/02/2003
Status:	SHIPPED
Depot:	DDYJ YOKOSUKA JAPANAP 96349-1500
Ship To:	R20550
Mode of Shipment:	SMALL PARCEL CARRIER
Carrier:	DHL AIRWAYS
Tracking #:	DHL 2345124644
TCN:	R205503090Y298XXX

HELP

### MILSTRIP Shipment Status - DHL AIRWAYS

Requisition Document #:

Air Bill: DHL 2345124644

TCN: R205503090Y298XXX

Deliver To:

Delivery Location: Bahrain - Bahrain

Delivery Date: April 05, 2003

Delivery Time: 13:15

Signed For By: ALONZO

Status Exception: Shipment delivered

Scan Activity:

- April 02, 2003 15:14 Yokohama - Japan Shipment picked up
- April 02, 2003 22:53 Tokyo - Japan Departed from DHL facility in Tokyo - Japan
- April 03, 2003 02:18 Hong Kong Hub - China Arrived at DHL facility in Hong Kong Hub - China
- April 03, 2003 14:56 Hong Kong Hub - China Departed from DHL facility in Hong Kong Hub - China
- April 03, 2003 23:01 Bahrain - Bahrain Arrived at DHL facility in Bahrain - Bahrain
- April 04, 2003 04:23 Bahrain - Bahrain Departed from DHL facility in Bahrain - Bahrain
- April 04, 2003 10:37 Bahrain - Bahrain Arrived at DHL Facility
- April 05, 2003 11:46 Bahrain - Bahrain With delivery courier
- April 05, 2003 13:15 Bahrain - Bahrain Shipment delivered

RETURN

# Hot link to catalog information

STANDARD NON-STANDARD

**Intermediate Selection - Standard Requisition Status**

Results for Document # R205503090Y298

Requisition #	NSN	Status	Last Holder	Qty	Priority	S
R205503090Y298	<a href="#">5960000739277</a>			2	02	0

Code Description (roll over code to view description)  
Requisition #: R205503090Y298 - Requisition Document Number

EXPORT RESULTS

HISTORY TRANSLATE FOLLOW-UP MODIFY ORDER SHIP STATUS ORDER A

## Technical Screening - Organic Sources

FSC	NIIN	COG	UI	Description	STD	NET
5960	000739277	9N	EA	ELECTRON TUBE	\$1,317.06	
AAC: D	IRRC:	PMIC: U	HMIC: Y	SLAC:	QUP: 1	
SLC: 0	MCC: Z	CIIC: U	SMIC:	SMCC: R	LRC:	
Demand:			SM&R:			
Procurement Lead Time:			Production Lead Time:			

Code Description (roll over code to view description)

STD: \$1,317.06 - Standard Price

CONDUCT STOCK CHECK

REQUISITION ITEM

ORGANIC SOURCES		MANUFACTURERS		SUITABLE ALTERNATIVES		
SOS	STD	NET	COG	NIIN	SAC	Order
S9E	\$1,317.06		9N	000739277	DN	
S9E	\$1,317.06			000739277	DS	
S9E	\$1,317.06			000739277	DA	
S9E	\$1,317.06			000739277	DF	
S9E	\$1,317.06			000739277	DM	

Code Description (roll over code to view description)

STD: \$1,317.06 - Standard Price

CREATE NEW SEARCH

# From catalog information to asset visibility

## Technical Screening - Organic Sources

### Stock Check

FSC	NIIN	COG	UI	Description	STD	NET
5960	000739277	9N	EA	ELECTRON TUBE	\$1,317.06	
AAC: D		IRRC:		PMIC: U	HMIC: Y	SLAC:
SLC: 0		MCC: Z		CIIC: U	SMIC:	SMCC: R
Demand:				SM&R:		
Procurement Lead Time:				Production Lead Time:		

Code Description (roll over code to view description)

Description: ELECTRON TUBE

CHECK QUERY  
STATUS

SUBMIT TECHNICAL  
SCREENING

REQUISITION  
ITEM

### Stock

Details	Data Source	Location/Activity	Quantity	Purpose	CC	Price	Order
	UADPS	NAS SIGONELLA	3	A	A	\$1,083.36	
	UADPS	FISC PEARL HARBOR	0	A	A	\$1,317.06	
	UADPS	FISC YOKOSUKA	0	A	A	\$1,317.06	
	SAMMS	Naval Air Fac Sup Dept Sigonella IT	3	A	A	\$1,317.06	
	SAMMS	DDD (Electronics) New Cumberland PA	50	A	A	\$1,317.06	
	VMSIR	Fleet Industrial Support Center, Pearl Harbor, HI	0	A	A	\$1,317.06	

EXPORT  
RESULTS

CREATE  
NEW SEARCH

UI	Description	STD	NET
EA	ELECTRON TUBE	\$1,317.06	
PMIC:	U	HMIC: Y	SLAC:
CIIC:	U	SMIC:	SMCC: R
		SM&R:	
		Production Lead Time:	

view description)

CONDUCT  
STOCK CHECK

REQUISITION  
ITEM

FACTURERS

SUITABLE ALTERNATIVES

# enterprise integration: a stop along the way to business on demand



# Promises and Problems

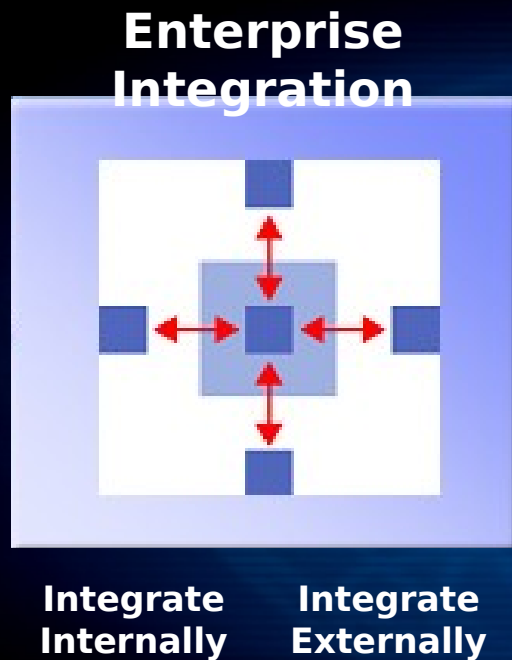
## The Promise of I/T

- Deploying new capabilities
- Cost reduction
- Efficiency
- Security and operational resiliency
- Workforce productivity

## The Problem with I/T

- Time to value
- Managing complexity and integration
- ROI
- Constrained resources
- Utilization of existing infrastructure

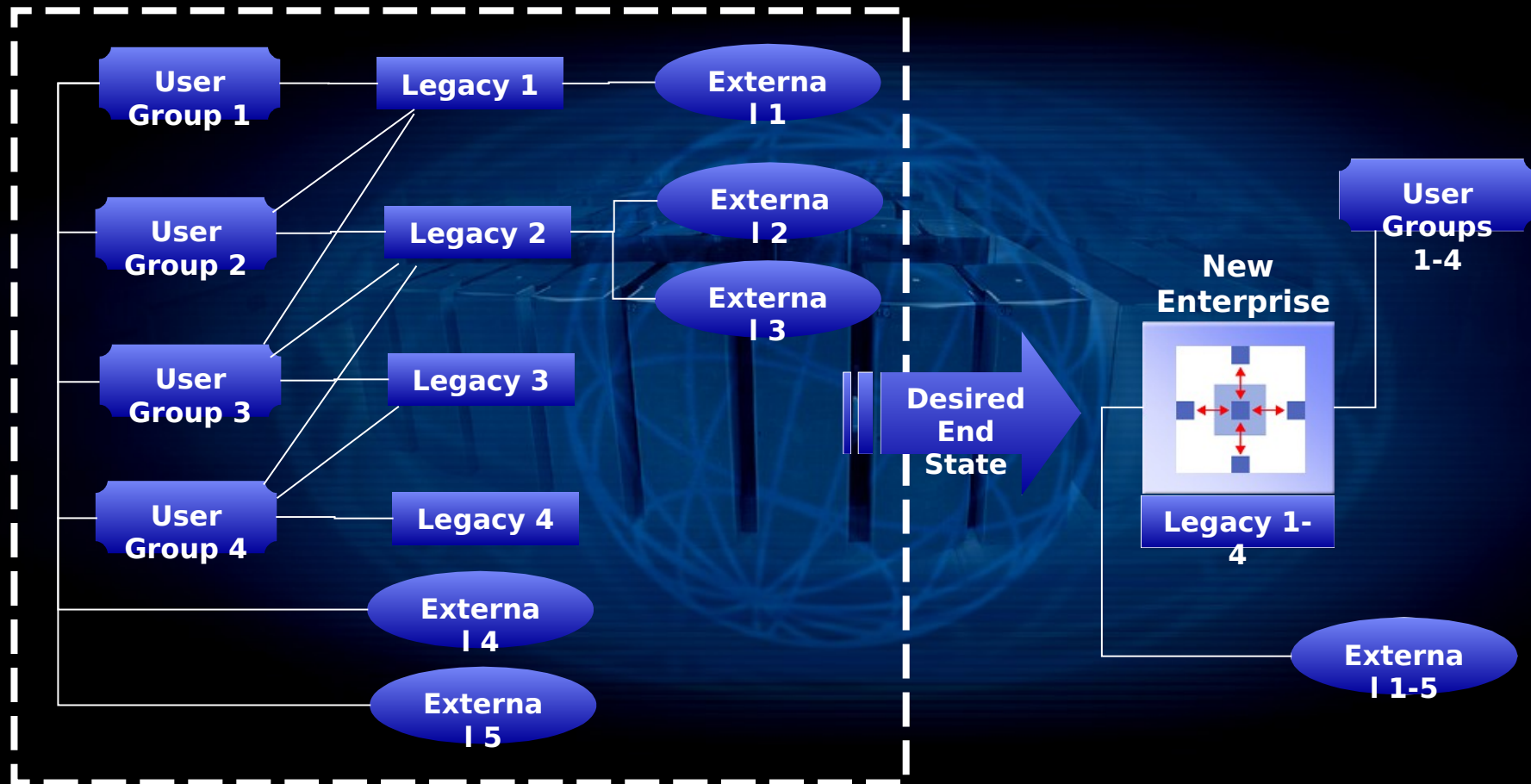
# The problem to be solved



- The client server legacy
  - Stovepipe systems
  - Data access silos
- Large scale enterprise integration initiatives: data warehousing, ERP, message brokering
  - Technical complexity
  - High risk
  - Potential for interim loss of user access
    - or costly parallel operations
  - Length of time to realization

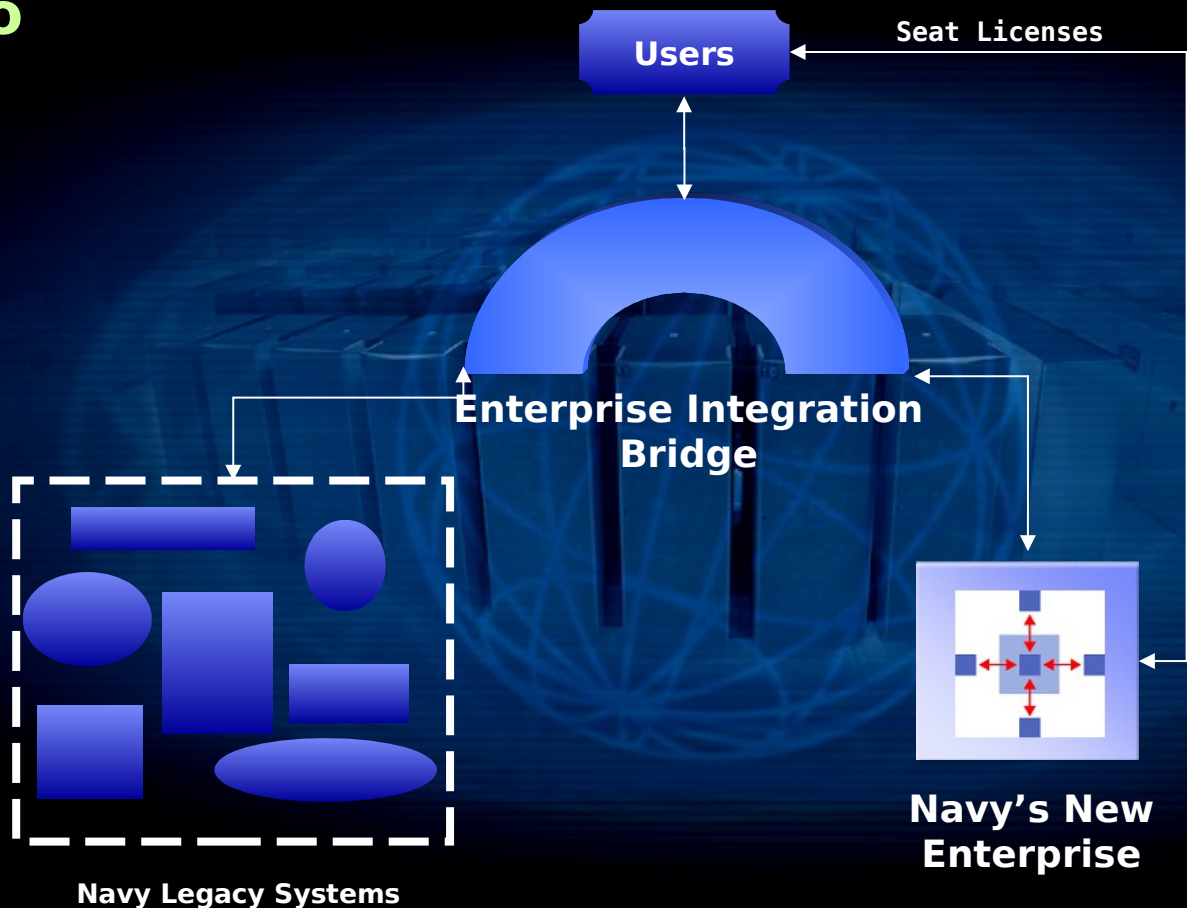
# The desired end state: Enterprise Integration

## Existing Systems Architecture





**As “legacy” data moves into the Enterprise system users need access to both legacy and new enterprise data so... you need a bridge between the two**



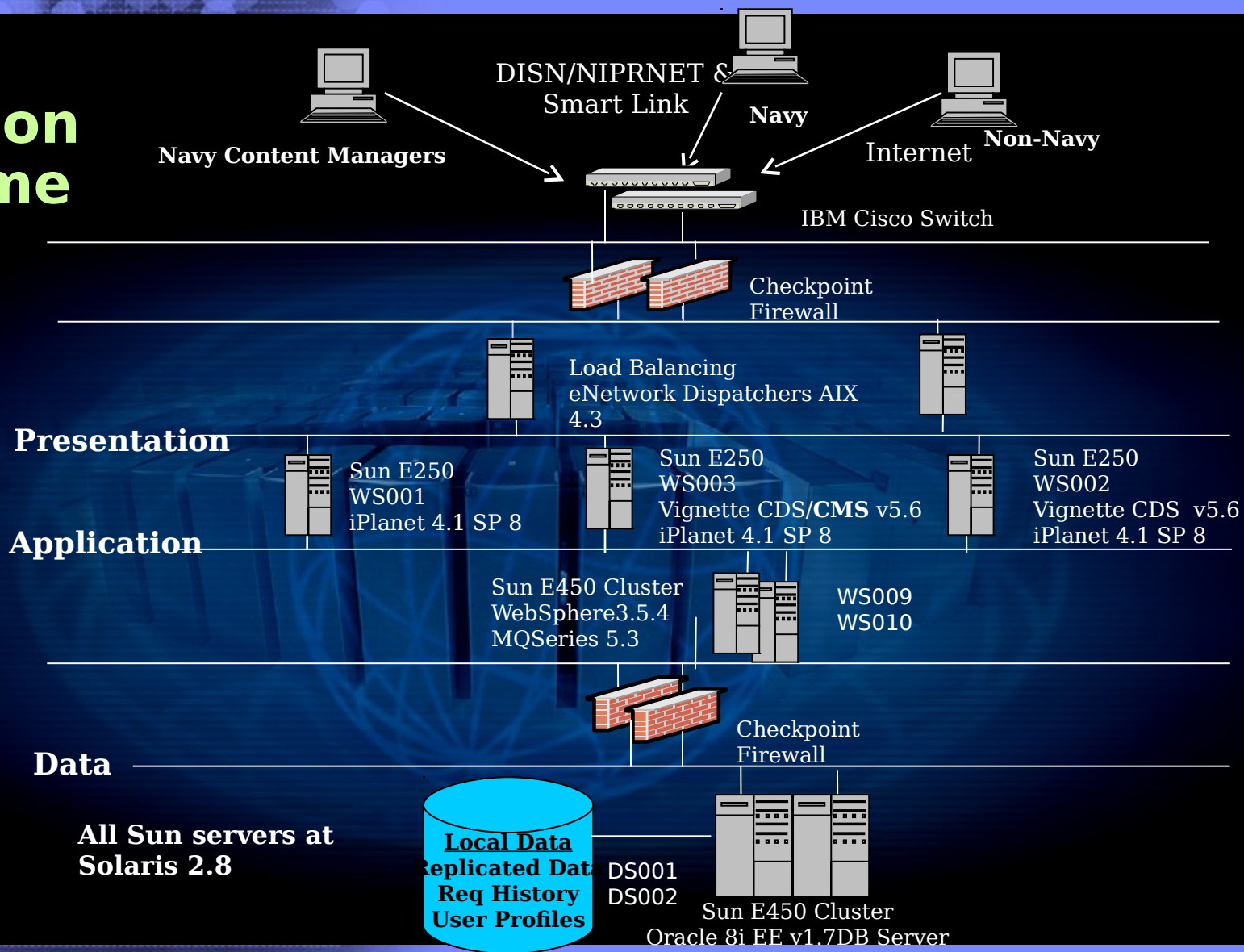






# Security, Web Services and Enterprise Integration

# OTS 3.2 Production Environment





# Security Architect

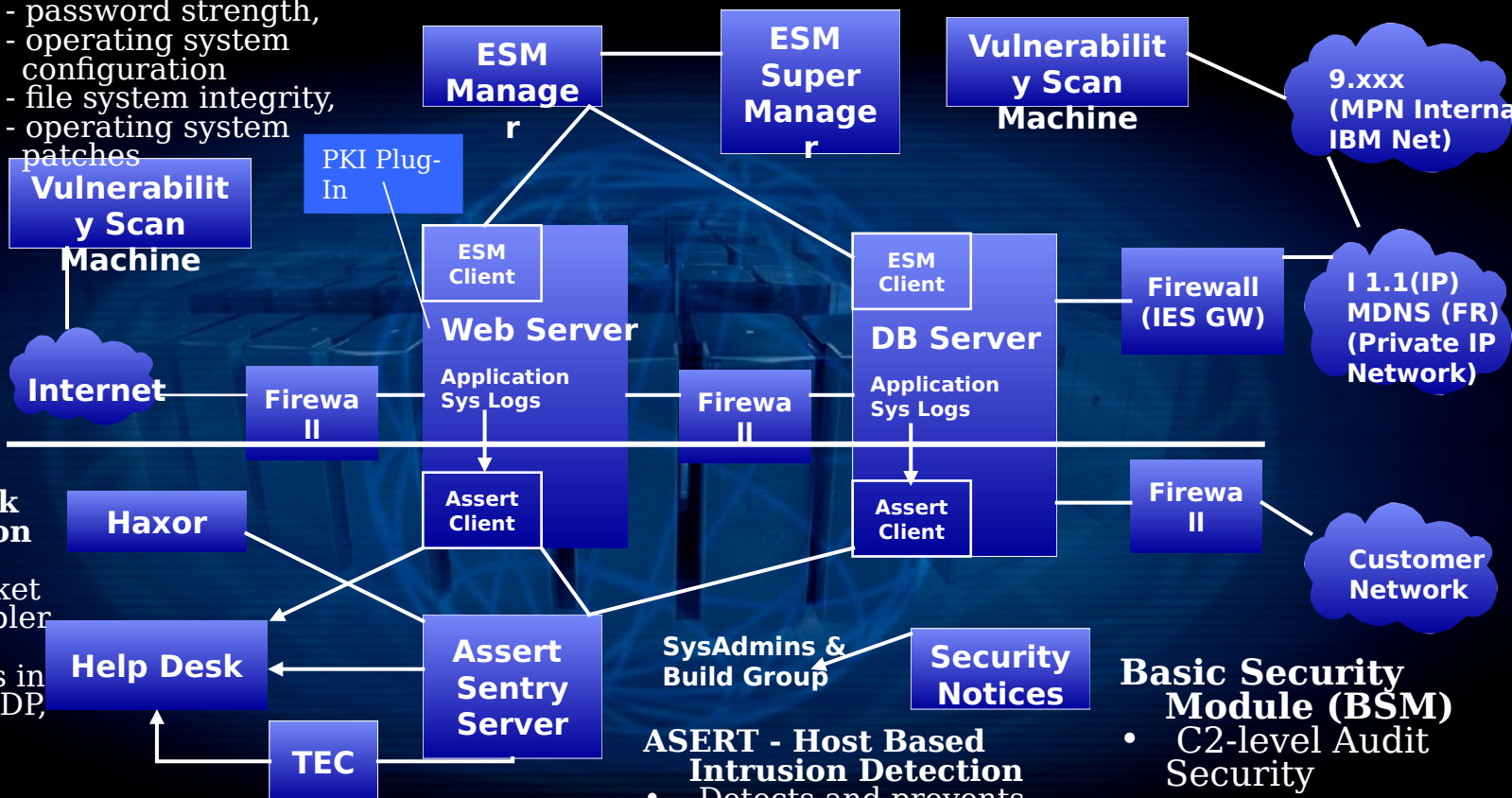
- DITSCAP Certified
  - BSM installed
    - **Audit Module that meets the C2-level security specifications as defined in the NCSC 'Orange Book' required for government customers.**
- Network Intrusion Detection
  - Proactive security policy
- TCP/IP Port Vulnerability Scanning
  - Network Service Auditor (NSA)
    - **Port Scan testing: weekly on all servers**
    - **Looking for trends at the site level**
- ISP providers limit traffic if a Denial of Service attack detected
- DoD supplied server certificates for SSL support
  - Browsers and web service integration
- Application level security
  - USERID/Password
  - OTS function authority based on user registration and approval process



# Security Architecture

## Enterprise Security Manager (ESM)

- Weekly Audit for:
  - password strength,
  - operating system configuration
  - file system integrity,
  - operating system patches



## HAXOR - Network Based Intrusion Detection

- Intelligent packet decoder/assembler and analyzer
- Detects attacks in FRAME, TCP, UDP, WWW, etc.

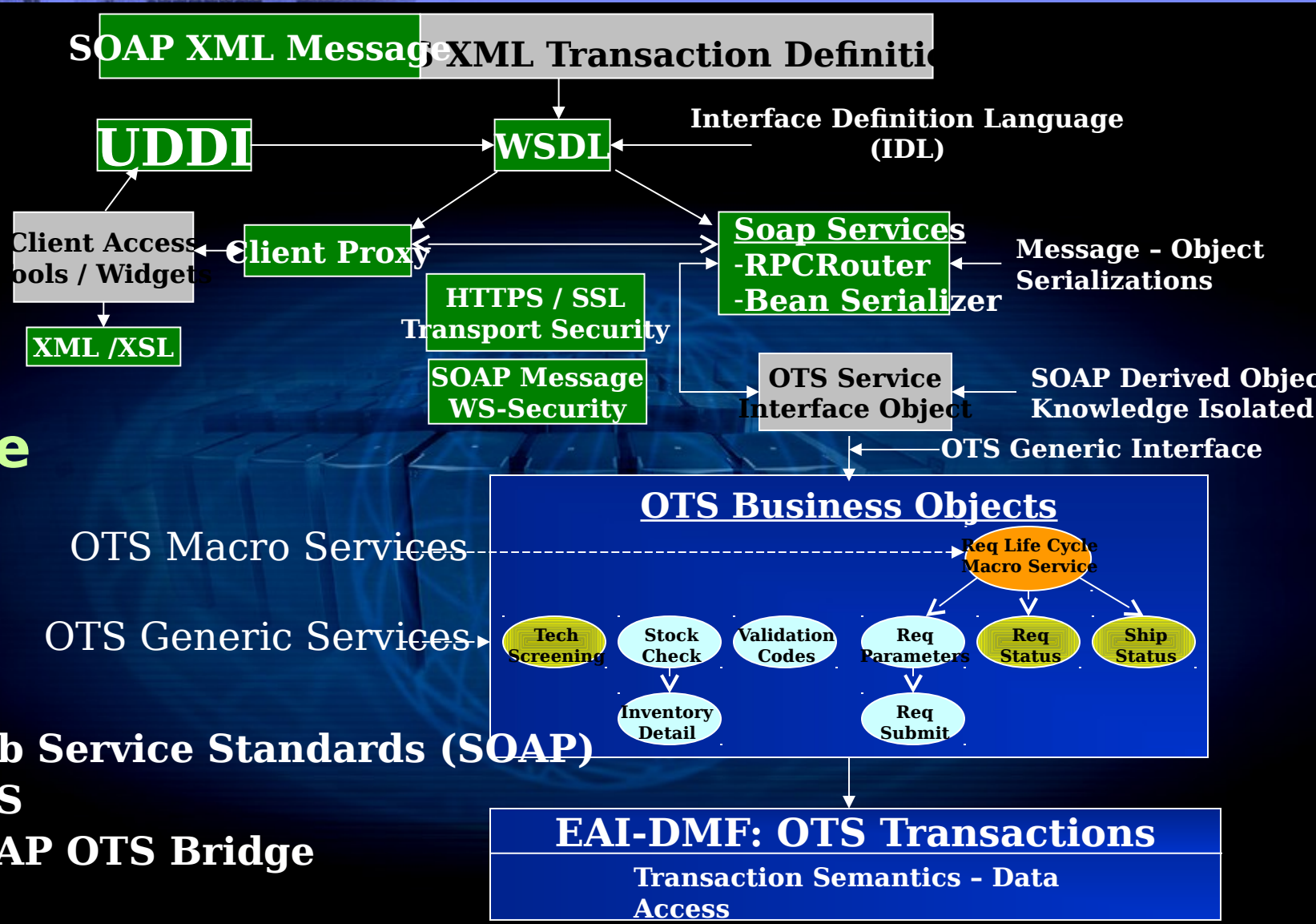
## ASERT - Host Based Intrusion Detection

- Detects and prevents attempts to probe services
- Prevents unauthorized access to TCP & UDP services

# Web Service Architecture for OTS Services

- Based on Industry Standards
- Platform and implementation neutral to provide true interoperability in a heterogeneous environment
- Reduces complexity by encapsulation
- Enables Interoperability by providing the ability to act as a wrapper for the supply side process to legacy applications
- Optimized for Flexibility in order to adapt to Industry and Navy Standards
- Reuse of current validation / definition, application, and data access components
- Well Defined Component-based Architecture separates SOAP middleware, service interface, business logic, and transaction semantics
- Implementation based on SOAP kernel adapting to new SOAP features

# Web Service S



Web Service Standards (SOAP)  
 OTS  
 SOAP OTS Bridge









# @business on demand<sup>TM</sup>